

A computer system, or other computing device, may include a monitor, printer, or other suitable display for providing any of the results mentioned herein to a user.

[0080] While some implementations have been described herein, it should be understood that they have been presented by way of example only, and not limitation. Thus, the breadth and scope of the present application should not be limited by any of the implementations described herein, but should be defined only in accordance with the following and later-submitted claims and their equivalents.

What is claimed is:

1. A database system for managing a first primary database, a second primary database, and a standby database, comprising: a processor; and memory coupled to the processor and storing instructions that, when executed by the processor, cause the database system to perform operations comprising:

- monitor an activity of the first primary database;
- migrate a portion of the first primary database to the second primary database;
- determine redo data corresponding to the activity, wherein the redo data has an associated redo rate;
- replicate the activity of the first primary database in the standby database based at least in part on the redo data, wherein the replicated activity in the standby database has an associated apply lag;
- determine an apply lag trend during the migration of the portion of the first primary database to the second primary database; and
- throttle the migration of the portion of the first primary database to the second primary database based at least in part on the apply lag trend.

2. The database system of claim 1, wherein:

- the redo rate corresponds to an estimate of time to create the redo data; and
- the apply lag corresponds to an estimate of time to apply the redo data to the standby database.

3. The database system of claim 1, the instructions further including instructions to cause the database to perform operations further comprising:

- determine the apply lag exceeds a threshold;
- determine an average apply rate over a first time period; and
- determine a redo rate generation rate over a second time period.

4. The database system of claim 3, in which the instructions for throttle the migration of the portion includes instructions to dynamically adjust the migration the portion based at least based in part on a status of a traffic light, the instructions further including instructions to cause the database to perform operations further comprising:

- set a status of the traffic light status based at least in part on whether the apply rate is less than the redo rate.

5. The database system of claim 4, wherein the status includes at least three states corresponding to: un-throttled, slow down, and stop.

6. The database system of claim 4, the instructions further including instructions to cause the database to perform operations further comprising:

- determine a sequence of operations corresponding to the migration of the portion of the first primary database to the second primary database; and
- scale a performance of the sequence of operations based on the traffic light.

7. The database system of claim 4, the instructions further including instructions to cause the database to perform operations further comprising:

- determine a sequence of operations corresponding to the activity of the first primary database; and
- scale execution of the sequence of operations based at least in part on the traffic light.

8. The database system of claim 1, the instructions further including instructions to cause the database to perform operations further comprising:

- determine an average apply rate over a first time period;
- determine a redo rate generation rate over a second time period;
- provide a traffic light having a status based at least in part on whether an average apply rate over a first time period is less than an average redo generation rate over a second time period; and
- scale, based at least in part on the status, a selected one or more of:

- the migration of the portion of the first primary database to the second primary database, or
- the activity of the first primary database.

9. The database system of claim 8, wherein the second time period is substantially less than the first time period.

10. The system of claim 1, in which the first primary database is to store data for multiple organizations, and wherein the migration of the portion of the first primary database to the second primary database comprises migration of data associated with a selected organization of the multiple organizations.

11. A method for managing a first primary database, a second primary database, and a standby database, comprising:

- monitoring an activity of a selected one or more of: the first primary database, the second primary database, or a logical database corresponding to selected portions of multiple databases;

- migrating a portion of the first primary database to the second primary database;

- determining a redo data corresponding to the activity, wherein the redo data has an associated redo rate;

- replicating the activity to the standby database based at least in part on the redo data, wherein the replicating has an associated apply lag;

- determining an apply lag trend based at least in part on one or more historical data associated with the migrating the portion; and

- throttling the migrating the portion based at least in part on the apply lag trend.

12. The method of claim 11, wherein:

- the redo rate corresponds to an estimate of time to create the redo data; and

- the apply lag corresponds to an estimate of time to apply the redo data to the standby database.

13. The method of claim 11, further comprising:

- evaluating if the apply lag exceeds a threshold, and if so, identifying an average apply rate over a first time period, and

- identifying a redo rate generation rate over a second time period;

- setting a status for a traffic light base on a comparison between the apply rate and the redo rate; and
- dynamically throttling the migrating responsive to the status.